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Industry Series

Preliminary Report

# Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.

## SIC 1796

During 1977, the establishments with payroll in this industry had business receipts of \$2.0 billion. Of this amount, \$1.95 billion were receipts for construction work, an increase of 38 percent compared with 1972. Their payments for construction work subcontracted to others amounted to \$70.7 million leaving net construction receipts of about \$1.88 billion. Total average employment in the industry showed an increase of 7 percent from 1972 to 41.9 thousand employees. Payroll for 1977 amounted to \$775.0 million. Value added at \$1.4 billion in 1977 was 45 percent more than in 1972.

The Installation or Erection of Building Equipment Special Trade Contractors, N.E.C. industry includes establishments primarily engaged in the installation of building equipment, not elsewhere classified, such as elevators, escalators, pneumatic tube systems, and dust collection equipment. This industry also includes contractors primarily engaged in the installation of or the dismantling of machinery or other industrial equipment. It also includes establishments engaged in the installation of built-in vacuum cleaning systems, revolving doors, and dumbwaiters. For a more detailed description, see the 1972 SIC Manual.<sup>1</sup>

For this census, a "construction establishment" was defined as a relatively permanent office or other place of business at which or from which the usual business activities related to construction were conducted. A separate census report was required from each establishment but not from each construction site. Instead, the data for work at each site were included in the report from the appropriate office or branch office. Foreign construction activities were not included in this census.

The 1977 Census of Construction Industries is the sixth census of construction establishments in the United States. As in previous years, it was conducted jointly with the censuses of mineral industries, manufactures, retail trade, wholesale trade, and service industries under authority of title 13 of the United

States Code. Although the first construction census was conducted covering 1929, only the data from the censuses of 1967 and 1972 are comparable with the 1977 data.

The 1977 estimates for establishments with payroll in all of the construction industries are based on reports from a probability sample of approximately 181,000 establishments selected from about 536,000 construction establishments with payroll. The sample included all construction establishments with a payroll equivalent of 15 or more full-time employees and a sample of those with fewer employees. There were two exceptions: In SIC 1521, sampling was employed in establishments with less than 20 employees because of the large number of establishments in that industry; in SIC 1795, all known establishments were included because of the very small number of establishments in that industry. The data obtained from the sample were inflated to represent all construction establishments with payroll. Complete descriptions of the sampling and estimating procedures will be included in the final reports.

Since the data in this report are based on a sample, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same schedules and procedures. The standard error shown in the tables is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population was surveyed. As calculated for this report, the standard error partially incorporates the effect of random errors of response, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete

<sup>1</sup> Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 4101-0066. Price \$6.75. 1977 Supplement. Stock No. 003-005-00176-0. Price 90 cents.



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Table 1. Detailed Statistics for Establishments With Payroll: 1977, 1972, and 1967

(Thousands of dollars. Detailed figures may not add to totals because of rounding. For meaning of abbreviations and symbols, see text)

Item	Installation or erection of building equipment special trade contractors, n.e.c. (1796)			Standard error of estimate (percent)		
	1977	1972	1967	1977	1972	1967
Number of establishments.....	2,509	1,945	1,456	3	4	6
Proprietors and working partners.....	595	559	555	10	13	12
All employees:						
March.....	40,266	39,973	21,353	1	1	1
May.....	41,516	32,986	26,292	1	1	1
August.....	42,896	41,279	26,796	1	1	1
November.....	42,695	40,586	25,712	1	1	1
Average.....	41,873	38,956	25,176	1	1	1
Construction workers:						
March.....	32,335	31,961	16,137	1	1	1
May.....	33,433	25,093	21,066	1	2	1
August.....	34,884	33,474	21,638	1	2	1
November.....	34,656	32,776	20,374	1	2	1
Average.....	33,857	31,058	19,936	1	1	1
Other employees:						
March.....	7,931	8,012	5,221	1	1	2
May.....	8,083	7,893	5,225	1	1	2
August.....	8,012	7,805	5,164	1	1	2
November.....	8,039	7,810	5,348	1	1	2
Average.....	8,028	7,951	5,272	1	1	2
Payroll, all employees.....	774,967	517,966	230,411	1	1	1
Payroll, construction workers.....	618,865	406,046	181,002	1	1	1
Payroll, other employees.....	156,102	111,920	49,419	1	1	1
First quarter payroll, all employees.....	177,073	(NA)	(NA)	1	(NA)	(NA)
Employer costs for fringe benefits.....	158,877	(NA)	(NA)	1	(NA)	(NA)
Legally required expenditures.....	78,218	(NA)	(NA)	1	(NA)	(NA)
Voluntary expenditures.....	80,660	(NA)	(NA)	1	(NA)	(NA)
All business receipts.....	1,996,210	1,457,818	660,843	1	1	1
Total construction receipts.....	1,946,553	1,408,192	644,758	1	1	1
Receipts for work subcontracted in from others.....	653,218	490,102	247,650	1	1	1
Other business and land receipts.....	49,657	49,626	16,194	2	9	2
Net construction receipts.....	1,875,878	1,349,214	621,974	1	1	1
Value added.....	1,416,829	978,219	434,642	1	1	1
Selected payments.....	579,381	479,599	226,457	1	1	1
Materials, components, and supplies.....	484,980	420,621	203,499	1	1	1
Construction work subcontracted to others.....	70,675	58,978	22,933	4	1	3
Selected power, fuels, and lubricants.....	23,726	(NA)	(NA)	1	(NA)	(NA)
Electricity.....	3,462	(NA)	(NA)	1	(NA)	(NA)
Natural gas.....	1,473	(NA)	(NA)	1	(NA)	(NA)
Gasoline and diesel fuel.....	15,500	(NA)	(NA)	1	(NA)	(NA)
Lubricating oils and greases.....	2,447	(NA)	(NA)	1	(NA)	(NA)
Other.....	844	(NA)	(NA)	3	(NA)	(NA)
Rental payments for machinery, equipment, and structures.....	22,760	(NA)	(NA)	1	(NA)	(NA)
For machinery and equipment.....	14,755	11,883	3,333	1	2	4
For structures.....	8,005	(NA)	(NA)	1	(NA)	(NA)
Selected purchased services.....	27,985	(NA)	(NA)	1	(NA)	(NA)
Communication.....	12,978	(NA)	(NA)	2	(NA)	(NA)
Repairs to structures and related facilities.....	753	(NA)	(NA)	1	(NA)	(NA)
Repairs to machinery and equipment.....	14,254	(NA)	(NA)	1	(NA)	(NA)
Capital expenditures.....	32,946	17,638	7,492	1	3	6
New.....	25,203	14,316	5,958	1	3	4
Structures and related facilities.....	3,118	1,255	1,762	2	15	5
Machinery and equipment, including automobiles and trucks.....	22,085	13,061	4,196	1	3	4
Automobiles and trucks intended primarily for highway use.....	9,932	(NA)	(NA)	2	(NA)	(NA)
Used.....	7,743	3,322	1,534	2	4	22
Structures and related facilities.....	3,317	581	128	1	1	17
Machinery and equipment, including automobiles and trucks.....	4,426	2,741	1,406	2	5	25
Fixed assets and depreciation:						
Gross book value of depreciable assets at end of year.....	222,163	140,443	(NA)	1	2	(NA)
Accumulated depreciation at end of year.....	111,868	76,153	(NA)	1	2	(NA)
Net value of depreciable assets at end of year.....	110,295	64,290	(NA)	1	2	(NA)
Depreciation charges during year.....	21,006	13,554	(NA)	1	2	(NA)
Structures, additions, and related facilities:						
Gross book value of depreciable assets at end of year.....	51,112	30,049	(NA)	1	2	(NA)
Accumulated depreciation at end of year.....	15,951	9,311	(NA)	1	2	(NA)
Net value of depreciable assets at end of year.....	35,161	20,738	(NA)	1	2	(NA)
Depreciation charges during year.....	2,305	1,438	(NA)	2	3	(NA)
Machinery and equipment:						
Gross book value of depreciable assets at end of year.....	171,051	110,394	(NA)	1	2	(NA)
Accumulated depreciation at end of year.....	95,917	66,842	(NA)	1	2	(NA)
Net value of depreciable assets at end of year.....	75,134	43,552	(NA)	1	3	(NA)
Depreciation charges during year.....	18,701	12,116	(NA)	1	2	(NA)

<sup>1</sup>Includes data for power, fuels, and lubricants, now shown separately.



Table 2. **Construction Receipts for Establishments With Payroll by Type of Construction: 1977 and 1972**

(Thousands of dollars. Detailed figures may not add to totals because of rounding. For meaning of abbreviations and symbols, see text)

Item	Installation or erection of building equipment special trade contractors, n.e.c. (1796)		Standard error of estimate (percent)	
	1977	1972	1977	1972
Construction receipts.....	1,946,553	1,408,192	1	1
Building construction.....	1,706,086	1,252,135	1	1
Apartment buildings.....	198,029	129,656	1	1
Other residential buildings.....	108,215	116,987	2	3
Industrial buildings and warehouses.....	534,976	341,155	1	2
Office and bank buildings.....	414,098	327,691	1	1
Stores, restaurants, public garages, and automobile service stations....	113,156	75,168	2	3
Religious buildings.....	17,024	12,920	1	1
Educational buildings.....	90,399	92,283	1	2
Hospitals and institutional buildings.....	186,607	134,350	2	1
Other nonresidential buildings.....	43,580	21,925	4	4
Nonbuilding construction.....	138,282	114,045	4	2
Blast furnaces, petroleum refineries, and chemical complexes.....	55,372	(NA)	10	(NA)
Power plants.....	49,318	(NA)	1	(NA)
Other nonbuilding construction.....	33,592	(NA)	2	(NA)
Construction work not specified by kind.....	102,225	42,012	1	6

Note: See text for explanation of duplication.

census by less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error.

This report does not include figures for separate administrative offices, warehouses, garages, or other auxiliary units which service construction establishments of the same company. Data for separate central administrative offices and auxiliaries are collected in the enterprise statistics survey, a part of the economic censuses.

This report is one in a series presenting preliminary data collected in the 1977 Census of Construction Industries. The universe for this census included all establishments classified in the construction industries (SIC's 15, 16, 17, and 6552). This report will be superseded by a more detailed final report. In addition to data for establishments with payroll presented here, the final Industry Summary report and the reports in the Geographic Area Series will present limited data for construction establishments with no payroll during 1977.

The totals of construction receipts reported by all construction establishments in each of the several industry, State, or other groupings in this census contain varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted out to other construction firms and, therefore, will be included in the subcontractor's receipts. To avoid this duplication, a "net construction receipts" figure has been derived by subtracting the payments made for construction work subcontracted to others from the construc-

tion receipts.

Usually, "value added" is the best measure for comparing the relative economic importance of industries or areas. It eliminates the duplication in receipts because of subcontracting. It also eliminates from the output measure the cost of materials, which differs in relative importance among areas and industries. For this census, "value added" is equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for industries for which land receipts are significant, "value added" is equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

The symbols in the tables mean:

- Represents zero.
- D Withheld to avoid disclosing figures for individual companies; figures are included in higher level totals.
- S Withheld because estimates did not meet publication standards on the basis of either the associated standard error or a consistency review.
- Z Standard error of estimate is greater than zero but less than 1 percent.
- a Sampling error is greater than 40 percent.
- NA Not available; data were not collected.

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